

What is claimed is:

1. An organic film formation apparatus for forming thin film made of an organic matter on a substrate having a mask for separately painting pixels on an organic film formation surface thereof, said organic film formation apparatus comprising:

a chamber for containing said substrate;

holding means for holding said substrate, said holding means being provided in said chamber;

vaporizing means for vaporizing organic raw material into gas phase to generate raw material gas;

carrier-gas-introducing means for introducing carrier gas and mixing said raw material gas and said carrier gas;

raw material gas transportation means for transporting said raw material gas using said carrier gas;

discharging means for discharging said raw material gas transported by said raw material gas transportation means into said chamber; and

exhausting means for exhausting said chamber,

wherein said substrate is deposited within said chamber with said substrate being set in an arrangement selected from an arrangement in which said organic film formation surface of said substrate faces upward in a vertical direction straight up from the ground, an arrangement in which said organic film formation surface of said substrate is put in parallel to the vertical direction, and an arrangement in which said organic film formation surface of said substrate is slanted relative to the vertical direction.

2. The organic film formation apparatus as claimed in Claim 1, wherein within said chamber, said substrate is set in an arrangement selected from arrangements along

a circumference whose center places said discharging means except for a range in angles of $\pm 10^\circ$ of upper side with respect to the vertical direction.

3. The organic film formation apparatus as claimed in Claim 1, wherein said discharging means discharges the raw material gas within a range in angles of $\pm 90^\circ$ with respect to a direction orthogonal to said organic film formation surface of said substrate.

4. The organic film formation apparatus as claimed in Claim 1, wherein said discharging means discharges the raw material gas within a range in angles of $\pm 45^\circ$ with respect to a direction orthogonal to said organic film formation surface of said substrate.

5. The organic film formation apparatus as claimed in Claim 1, wherein said discharging means discharges the raw material gas in a direction orthogonal to said organic film formation surface of said substrate.

6. The organic film formation apparatus as claimed in Claim 1, wherein said holding means slides said substrate having said mask for separately painting pixels.

7. The organic film formation apparatus as claimed in Claim 1, wherein said holding means turns said substrate having said mask for separately painting pixels.

8. The organic film formation apparatus as claimed in Claim 1, wherein said holding means turns to allow said substrate having said mask for separately painting pixels to move around an axis of said holding means.

9. The organic film formation apparatus as claimed in Claim 1, wherein said holding means turns said substrate having said mask for separately painting pixels while sliding said substrate.

10. The organic film formation apparatus as claimed in Claim 1, wherein said holding means includes cooling means for cooling a back face of said substrate having said mask for separately painting pixels.

11. An organic film formation apparatus for forming thin film made of an organic matter on a substrate having a mask for separately painting pixels on an organic film formation surface thereof, said organic film formation apparatus comprising:

a chamber for containing said substrate;

holding means for holding said substrate, said holding means being provided in said chamber;

vaporizing means for vaporizing organic raw material into gas phase to generate raw material gas;

carrier gas introducing means for introducing carrier gas and mixing said raw material gas and said carrier gas;

raw material gas transportation means for transporting said raw material gas using said carrier gas;

discharging means for discharging said raw material gas transported by said raw material gas transportation means into said chamber; and

exhausting means for exhausting said chamber,

wherein said substrate is deposited within said chamber with said substrate being set in an arrangement selected from an arrangement in which said organic film formation surface of said substrate faces downward in a vertical direction straight up from the ground, an arrangement in which said organic film formation surface of said

substrate is put in parallel to the vertical direction, and an arrangement in which said organic film formation surface of said substrate is slanted relative to the vertical direction.

12. The organic film formation apparatus as claimed in Claim 11, wherein within said chamber, said substrate is set in an arrangement selected from arrangements along a circumference whose center places said discharging means except for a range in angles of $\pm 30^\circ$ of lower side with respect to the vertical direction.

13. The organic film formation apparatus as claimed in Claim 11, wherein said discharging means discharges the raw material gas within a range in angles of $\pm 90^\circ$ with respect to a direction orthogonal to said organic film formation surface of said substrate.

14. The organic film formation apparatus as claimed in Claim 11, wherein said discharging means discharges the raw material gas within a range in angles of $\pm 45^\circ$ with respect to a direction orthogonal to said organic film formation surface of said substrate.

15. The organic film formation apparatus as claimed in Claim 11, wherein said discharging means discharges the raw material gas in a direction orthogonal to said organic film formation surface of said substrate.

16. The organic film formation apparatus as claimed in Claim 11, wherein said holding means slides said substrate having said mask for separately painting pixels.

17. The organic film formation apparatus as claimed in Claim 11, wherein said holding means turns said substrate having said mask for separately painting pixels.

18. The organic film formation apparatus as claimed in Claim 11, wherein said holding means turns to allow said substrate having said mask for separately painting pixels to move around an axis of said holding means.

19. The organic film formation apparatus as claimed in Claim 11, wherein said holding means turns said substrate having said mask for separately painting pixels while sliding said substrate.

20. The organic film formation apparatus as claimed in Claim 11, wherein said holding means includes cooling means for cooling a back face of said substrate having said mask for separately painting pixels.

21. An organic film formation apparatus for forming thin film made of an organic matter on a substrate having a mask for separately painting pixels on an organic film formation surface thereof, said organic film formation apparatus comprising:

a chamber for containing said substrate;

holding means for holding said substrate, said holding means being provided in said chamber;

vaporizing means for vaporizing organic raw material into gas phase to generate raw material gas;

carrier gas introducing means for introducing carrier gas and mixing said raw material gas and said carrier gas;

raw material gas transportation means for transporting said raw material gas using said carrier gas;

discharging means for discharging said raw material gas transported by said raw material gas transportation means into said chamber; and

exhausting means for exhausting said chamber,

wherein said substrate is deposited within said chamber with said substrate being set in an arrangement selected from an arrangement in which said organic film formation surface of said substrate is put in parallel to a vertical direction straight up from the ground and an arrangement in which said organic film formation surface of said substrate is slanted relative to the vertical axis.

22. The organic film formation apparatus as claimed in Claim 21, wherein within said chamber, said substrate is set in an arrangement selected from arrangements along a circumference whose center places said discharging means within a range in angles from $+80^{\circ}$ to -60° with respect to a horizontal axis of said chamber at both opposite sides along the vertical axis of said chamber.

23. The organic film formation apparatus as claimed in Claim 21, wherein said discharging means discharges the raw material gas within a range in angles of $\pm 90^{\circ}$ with respect to a direction orthogonal to said organic film formation surface of said substrate.

24. The organic film formation apparatus as claimed in Claim 21, wherein said discharging means discharges the raw material gas within a range in angles of $\pm 45^{\circ}$ with respect to a direction orthogonal to said organic film formation surface of said substrate.

25. The organic film formation apparatus as claimed in Claim 21, wherein said discharging means discharges the raw material gas in a direction orthogonal to said organic film formation surface of said substrate.

26. The organic film formation apparatus as claimed in Claim 21, wherein said holding means slides said substrate having said mask for separately painting pixels.

27. The organic film formation apparatus as claimed in Claim 21, wherein said holding means turns said substrate having said mask for separately painting pixels.

28. The organic film formation apparatus as claimed in Claim 21, wherein said holding means turns to allow said substrate having said mask for separately painting pixels to move around an axis of said holding means.

29. The organic film formation apparatus as claimed in Claim 21, wherein said holding means turns said substrate having said mask for separately painting pixels while sliding said substrate.

30. The organic film formation apparatus as claimed in Claim 21, wherein said holding means includes cooling means for cooling a back face of said substrate having said mask for separately painting pixels.